

PROCESSOR AND METHOD FOR WEIGHT DETECTION IN A CLOSED  
LOOP DIVERSITY MODE WCDMA SYSTEM

Abstract of the Disclosure

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A receiver and method for weight detection use received channel  
estimations and prior feedback information sent to a transmitter to estimate  
channel weights. The estimated channel weights may have been used by a base  
station to transmit diversity mode signals. In one embodiment, a trellis algorithm  
10 may be used to determine weights with no significant time-slot delay. The weights  
may be used to generate channel taps for use by a rake receiver in combining  
multipath components of received signals. In one embodiment, the receiver and  
method for weight detection may be suitable for use in closed loop diversity mode  
communication systems, including a Wideband Code Division Multiple Access  
15 (WCDMA) system.

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